IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:
  Bansal, et al.

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Examiner: Dass, Harish T.

For: ONLINE E-COMMERCE TRANSACTIONS INCORPORATING EFFECTS OF UNCERTAINTY AND RISK FACTORS

AMENDMENT UNDER 37 C.F.R. §1.116

Mail Stop Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This amendment is in response to the Office Action mailed November 15, 2007, setting a three-month statutory period for response. Therefore, this amendment is timely filed. Please amend the above-identified patent application as follows:

IN THE CLAIMS:

Please amend the claims as follows:

1.	(Previously Presented) A method for enabling online consideration of effects of uncertainty and risk factors while negotiating one or more e-commerce transactions comprising:

maintaining one or more of the following online databases:

an updated online database of prices derivatives associated with goods or services involved in completing said transactions,

an online database of insurance derivatives associated with risks involved in completing said transactions,

an online database of counter party risk classification information associated with activities of said transactions,

an online database of market rules that govern said negotiations,

an online database of customized information related to risks at a given point of time for specified transactions;

maintaining an updated online database of currency exchange derivatives associated with each activity involved in completing said transactions;

determining costs associated with one or more risk elements by using data corresponding to parameters of said transactions in conjunction with requirements of applicable market rules and information from said online databases; and

modifying said data corresponding to said parameters of said transactions by using said information from said databases.

2.	(Currently Amended) The method as claimed in claim 1, <u>all the limitations of which are incorporated herein by reference,</u> further utilized for determining:

a set of said e-commerce transactions that should take place from amongst various possibilities given said effects of uncertainty and said risk factors and a set of said e-commerce transactions that should not take place from amongst various possibilities given said effects of uncertainty and said risk factors,

prices to be paid by buyers, amounts to be received by sellers and payments to be made to other service providers, in respective currencies, for said set of said transactions that should take place.

3.   (Currently Amended) The method as claimed in claim 1, <u>all the limitations of which are incorporated herein by reference,</u> wherein said prices derivatives provide contractable rates of identical goods or services derived from primary goods or services being negotiated for one of purchase and sale at specified future dates.

4.   (Currently Amended) The method as claimed in claim 1, <u>all the limitations of which are incorporated herein by reference,</u> wherein said currency exchange derivatives provide contractable rates of currency exchange at specified future dates.

5.   (Currently Amended) The method as claimed in claim 1, <u>all the limitations of which are incorporated herein by reference,</u> wherein said modification may involve converting amounts from original currencies to amounts in different currencies using said currency exchange derivatives.

6.   (Currently Amended) The method as claimed in claim 1, <u>all the limitations of which are incorporated herein by reference,</u> wherein said counter party risk classification information includes an estimated uncertainty of an opposite party fulfilling its obligation.

7.   (Currently Amended) The method as claimed in claim 1, <u>all the limitations of which are incorporated herein by reference,</u> wherein each of said databases are located at a seller end, located at a buyer end, or hosted by a third party.

8.   (Currently Amended) The method as claimed in claim 1, all the limitations of which are incorporated herein by reference, wherein said method is implemented by an online intermediary providing said facilities as a service against a fee of commission.

9.   (Currently Amended) The method as claimed in claim 1, all the limitations of which are incorporated herein by reference, applied to a transaction between a single buyer and single seller negotiating online.

10.   (Currently Amended) The method as claimed in claim 1, all the limitations of which are incorporated herein by reference, applied to online auctions between a seller and multiple buyers.

11.   (Currently Amended) The method as claimed in claim 1, all the limitations of which are incorporated herein by reference, applied to online reverse auctions between a buyer and multiple sellers.

12.   (Currently Amended) The method as claimed in claim 7, all the limitations of which are incorporated herein by reference, applied to two-sided matching markets involving multiple buyers and sellers.

13.   (Currently Amended) The method as claimed in claim 10, all the limitations of which are incorporated herein by reference, wherein a winning bid for desired goods or services in an online auction is selected on a basis of highest risk-adjusted payout to said seller.

14.   (Currently Amended) The method as claimed in claim 11, all the limitations of which are incorporated herein by reference, wherein a winning offer for desired goods or service in an online reverse auction is selected on a basis of least risk adjusted cost to said buyer.

15.   (Currently Amended) The method as claimed in claim 13, <u>all the limitations of which are incorporated herein by reference,</u> wherein said highest risk-adjusted payout to said seller is determined by incorporation of an effect of various said derivatives relevant for completion of said transaction related to each bid if said bid is to be selected.

16.   (Currently Amended) The method as claimed in claim 15, <u>all the limitations of which are incorporated herein by reference,</u> wherein said incorporation of said effect of various said derivatives is by deduction of said costs associated with said risk elements.

17.   (Currently Amended) The method as claimed in claim 14, <u>all the limitations of which are incorporated herein by reference,</u> wherein said least risk-adjusted cost to said buyer is determined by incorporation of an effect of various said derivatives relevant for completion of said transaction related to each sell offer if said sell offer is to be selected.

18.   (Currently Amended) The method as claimed in claim 17, <u>all the limitations of which are incorporated herein by reference,</u> wherein said incorporation of said effect of various said derivatives is by addition of said costs associated with said risk elements.

19.   (Currently Amended) The method as claimed in claim 13, <u>all the limitations of which are incorporated herein by reference,</u> wherein relevant derivatives of said selected bid are booked with said online derivative services for completion of said transaction.

20.   (Currently Amended) The method as claimed in claim 14, <u>all the limitations of which are incorporated herein by reference,</u> wherein relevant derivatives of said selected bid are booked with said online derivative services for completion of said transaction.

21.   (Currently Amended) The method as claimed in claim 10, <u>all the limitations of which are incorporated herein by reference,</u> wherein a minimum required qualifying bid

amount is communicated to a potential bidder in response to request for information about a current status of said auctions.

22. (Currently Amended) The method as claimed in claim 11, <u>all the limitations of which are incorporated herein by reference,</u> wherein a maximum allowable offer amount is communicated to a potential seller in response to request for the information about the current status of the reverse auctions.

23. (Currently Amended) The method as claimed in claim 12, <u>all the limitations of which are incorporated herein by reference,</u> wherein sell orders resident in said databases are shown to a potential buyer after online addition of said computed costs associated with said risk elements to a price quoted by one of said sellers for each of said sell orders in response to request for such information in a two-sided matching market and online incorporation of values of applicable derivatives.

24. (Currently Amended) The method as claimed in claim 12, <u>all the limitations of which are incorporated herein by reference,</u> wherein buy orders resident in said databases are shown to a potential seller after online deduction of said computed costs associated with said risk elements from a price quoted by one of said buyers for each of said sell orders in response to request for such information in a two-sided matching market and online incorporation of values of applicable derivatives.

25. (Currently Amended) The method as claimed in claim 12, <u>all the limitations of which are incorporated herein by reference,</u> wherein resident sell orders are prioritized for matching an incoming buy order in increasing order of net cost computed by addition of said computed costs associated with said risk elements to a price quoted by one of said sellers for each of said sell orders in a two-sided matching market and online incorporation of values of applicable derivatives.

26. (Currently Amended) The method as claimed in claim 12, <u>all the limitations of which are incorporated herein by reference,</u> wherein resident buy orders are prioritized for matching an incoming sell order in decreasing order of net price computed by deduction of said computed costs associated with risk elements to a price quoted by one of said buyers for each of said buy orders in a two-sided matching market and online incorporation of values of applicable derivatives.

27. (Currently Amended) The method as claimed in claim 12, <u>all the limitations of which are incorporated herein by reference,</u> wherein relevant derivatives for said transactions are booked with said online derivative services for completion of said transactions.

28-54. (Cancelled).

55. (Previously Presented) A computer program product comprising computer readable program code stored on computer readable storage medium embodied therein for enabling online consideration of effects of uncertainty and risk factors while negotiating one or more e-commerce transactions comprising:

computer readable program code configured for maintaining one or more of the following online databases:

an updated online database of prices derivatives associated with goods or services involved in completing said transactions,

an updated online database of currency exchange derivatives associated with each activity involved in completing said transactions,

an online database of insurance derivatives associated with risks involved in completing said transactions,

an online database of counter party risk classification information associated with activities of said transactions,

an online database of market rules that govern said negotiations,

an online database of customized information related to risks at a given

point of time for specified transactions;

computer readable program code configured for maintaining an updated online database of currency exchange derivatives associated with each activity involved in completing said transactions;

computer readable program code configured for determining costs associated with one or more risk elements by using data corresponding to parameters of said transactions in conjunction with requirements of applicable market rules and information from said online databases; and

computer readable program code configured for modifying said data corresponding to said parameters of said transactions by using said information from said databases.

56. (Currently Amended) The computer program product as claimed in claim 55, all the limitations of which are incorporated herein by reference, further configured for determining:

a set of said e-commerce transactions that should take place from amongst various possibilities given said effects of uncertainty and said risk factors and a set of said e-commerce transactions that should not take place from amongst various possibilities given said effects of uncertainty and said risk factors,

prices to be paid by buyers, amounts to be received by sellers and payments to be made to other service providers, in respective currencies, for said set of said transactions that should take place.

57. (Currently Amended) The computer program product as claimed in claim 55, all the limitations of which are incorporated herein by reference, wherein said prices derivatives provide contractable rates of identical goods or services derived from primary goods or services being negotiated for one of purchase and sale at specified future dates.

58.   (Currently Amended) The computer program product as claimed in claim 55, all the limitations of which are incorporated herein by reference, wherein said currency exchange derivatives provide contractable rates of currency exchange at specified future dates.

59.   (Currently Amended) The computer program product as claimed in claim 55, all the limitations of which are incorporated herein by reference, wherein said modification may involve converting amounts from original currencies to amounts in different currencies using said currency exchange derivatives.

60.   (Currently Amended) The computer program product as claimed in claim 55, all the limitations of which are incorporated herein by reference, wherein said counter party risk classification information includes an estimated uncertainty of an opposite party fulfilling its obligation.

61.   (Currently Amended) The computer program product as claimed in claim 55, all the limitations of which are incorporated herein by reference, wherein each of said databases are located at a seller end, located at a buyer end, or hosted by a third party.

62.   (Currently Amended) The computer program product as claimed in claim 55, all the limitations of which are incorporated herein by reference, wherein said computer program product is configured for an online intermediary providing said facilities as a service against a fee of commission.

63.   (Currently Amended) The computer program product as claimed in claim 55, all the limitations of which are incorporated herein by reference, configured for a transaction between a single buyer and single seller negotiating online.

64. (Currently Amended) The computer program product as claimed in claim 55, all the limitations of which are incorporated herein by reference, configured for an online auctions between a seller and multiple buyers.

65. (Currently Amended) The computer program product as claimed in claim 55, all the limitations of which are incorporated herein by reference, configured for an online reverse auctions between a buyer and multiple sellers.

66. (Currently Amended) The computer program product as claimed in claim 61, all the limitations of which are incorporated herein by reference, configured for a two-sided matching markets involving multiple buyers and sellers.

67. (Currently Amended) The computer program product as claimed in claim 64, all the limitations of which are incorporated herein by reference, including computer readable program code configured for selecting a winning bid for desired goods or services in an online auction is selected on a basis of highest risk-adjusted payout to said seller.

68. (Currently Amended) The computer program product as claimed in claim 65, all the limitations of which are incorporated herein by reference, including computer readable program code configured for selecting a winning offer for desired goods or service in an online reverse auction is selected on a basis of least risk adjusted cost to said buyer.

69. (Currently Amended) The computer program product as claimed in claim 67, all the limitations of which are incorporated herein by reference, including computer readable program code configured for determining said highest risk-adjusted payout to said seller is determined by incorporation of an effect of various said derivatives relevant for completion of said transaction related to each bid if said bid is to be selected.

70.   (Currently Amended) The computer program product as claimed in claim 69, all the limitations of which are incorporated herein by reference, wherein said incorporation of said effect of various said derivatives is through computer readable program code configured for deducting said costs associated with said risk elements.

71.   (Currently Amended) The computer program product as claimed in claim 68, all the limitations of which are incorporated herein by reference, including computer readable program code configured for determining said least risk-adjusted cost to said buyer is determined by incorporation of an effect of various said derivatives relevant for completion of said transaction related to each sell offer if said sell offer is to be selected.

72.   (Currently Amended) The computer program product as claimed in claim 71, all the limitations of which are incorporated herein by reference, wherein said incorporation of said effect of various said derivatives is through computer readable program code configured for adding said costs associated with said risk elements.

73.   (Currently Amended) The computer program product as claimed in claim 67, all the limitations of which are incorporated herein by reference, including computer readable program code configured for booking relevant derivatives of said selected bid with said online derivative services for completion of said transaction.

74.   (Currently Amended) The computer program product as claimed in claim 68, all the limitations of which are incorporated herein by reference, including computer readable program code configured for booking relevant derivatives of said selected bid with said online derivative services for completion of said transaction.

75.   (Currently Amended) The computer program product as claimed in claim 64, all the limitations of which are incorporated herein by reference, including computer

readable program code configured for communicating a minimum required qualifying bid amount to a potential bidder in response to request for information about a current status of said auctions.

76.   (Currently Amended) The computer program product as claimed in claim 65, all the limitations of which are incorporated herein by reference, including computer readable program code configured for communicating a maximum allowable offer amount to a potential seller in response to request for the information about the current status of the reverse auctions.

77.   (Currently Amended) The computer program product as claimed in claim 66, all the limitations of which are incorporated herein by reference, including computer readable program code configured for showing sell orders resident in said databases are shown to a potential buyer after online addition of said computed costs associated with said risk elements to a price quoted by one of said sellers for each of said sell orders in response to request for such information in a two-sided matching market and online incorporation of values of applicable derivatives.

78.   (Currently Amended) The computer program product as claimed in claim 66, all the limitations of which are incorporated herein by reference, including computer readable program code configured for showing buy orders resident in said databases are shown to a potential seller after online deduction of said computed costs associated with said risk elements from a price quoted by one of said buyers for each of said sell orders in response to request for such information in a two-sided matching market and online incorporation of values of applicable derivatives.

79.   (Currently Amended) The system as claimed in claim 66, all the limitations of which are incorporated herein by reference, including computer readable program code configured for prioritizing resident sell orders are prioritized for matching an incoming

buy order in increasing order of net cost computed by addition of said computed costs associated with said risk elements to a price quoted by one of said sellers for each of said sell orders in a two-sided matching market and online incorporation of values of applicable derivatives.

80.   (Currently Amended) The computer program product as claimed in claim 66, <u>all the limitations of which are incorporated herein by reference,</u> including computer readable program code configured for prioritizing resident buy orders are prioritized for matching an incoming sell order in decreasing order of net price computed by deduction of said computed costs associated with risk elements to a price quoted by one of said buyers for each of said buy orders in a two-sided matching market and online incorporation of values of applicable derivatives.

81.   (Currently Amended) The computer program product as claimed in claim 66, <u>all the limitations of which are incorporated herein by reference,</u> including computer readable program code configured for booking relevant derivatives for said transactions with said online derivative services for completion of said transactions.

82.   (Previously Presented) A method for enabling online consideration of effects of uncertainty and risk factors while negotiating one or more e-commerce transactions comprising:

maintaining one or more of the following online databases:

an updated online database of prices derivatives associated with goods or services involved in completing said transactions,

an online database of insurance derivatives associated with risks involved in completing said transactions,

an online database of counter party risk classification information associated with activities of said transactions,

an online database of market rules that govern said negotiations,

an online database of customized information related to risks at a given point of time for specified transactions;

maintaining an updated online database of currency exchange derivatives associated with each activity involved in completing said transactions, wherein said currency exchange derivatives provide contractable rates of currency exchange at specified future dates;

determining costs associated with one or more risk elements by using data corresponding to parameters of said transactions in conjunction with requirements of applicable market rules and information from said online databases; and

modifying said data corresponding to said parameters of said transactions by using said information from said databases.

83.   (Currently Amended) The method as claimed in claim 82, all the limitations of which are incorporated herein by reference, further utilized for determining:

a set of said e-commerce transactions that should take place from amongst various possibilities given said effects of uncertainty and said risk factors and a set of said e-commerce transactions that should not take place from amongst various possibilities given said effects of uncertainty and said risk factors,

prices to be paid by buyers, amounts to be received by sellers and payments to be made to other service providers, in respective currencies, for said set of said transactions that should take place.

84.   (Currently Amended) The method as claimed in claim 82, all the limitations of which are incorporated herein by reference, wherein said prices derivatives provide contractable rates of identical goods or services derived from primary goods or services being negotiated for one of purchase and sale at specified future dates.

85.   (Currently Amended) The method as claimed in claim 82, all the limitations of which are incorporated herein by reference, wherein said modification may involve

converting amounts from original currencies to amounts in different currencies using said currency exchange derivatives.

86.	(Currently Amended) The method as claimed in claim 82, <u>all the limitations of which are incorporated herein by reference,</u> wherein said counter party risk classification information includes an estimated uncertainty of an opposite party fulfilling its obligation.

87.	(Currently Amended) The method as claimed in claim 82, <u>all the limitations of which are incorporated herein by reference,</u> wherein each of said databases are located at a seller end, located at a buyer end, or hosted by a third party.

88.	(Currently Amended) The method as claimed in claim 82, <u>all the limitations of which are incorporated herein by reference,</u> wherein said method is implemented by an online intermediary providing said facilities as a service against a fee of commission.

89.	(Currently Amended) The method as claimed in claim 82, <u>all the limitations of which are incorporated herein by reference,</u> applied to a transaction between a single buyer and single seller negotiating online.

90.	(Currently Amended) The method as claimed in claim 82, <u>all the limitations of which are incorporated herein by reference,</u> applied to online auctions between a seller and multiple buyers.

91.	(Currently Amended) The method as claimed in claim 82, <u>all the limitations of which are incorporated herein by reference,</u> applied to online reverse auctions between a buyer and multiple sellers.

92. (Currently Amended) The method as claimed in claim 87, <u>all the limitations of which are incorporated herein by reference,</u> applied to two-sided matching markets involving multiple buyers and sellers.

93. (Currently Amended) The method as claimed in claim 90, <u>all the limitations of which are incorporated herein by reference,</u> wherein a winning bid for desired goods or services in an online auction is selected on a basis of highest risk-adjusted payout to said seller.

94. (Currently Amended) The method as claimed in claim 91, <u>all the limitations of which are incorporated herein by reference,</u> wherein a winning offer for desired goods or service in an online reverse auction is selected on a basis of least risk adjusted cost to said buyer.

95. (Currently Amended) The method as claimed in claim 93, <u>all the limitations of which are incorporated herein by reference,</u> wherein said highest risk-adjusted payout to said seller is determined by incorporation of an effect of various said derivatives relevant for completion of said transaction related to each bid if said bid is to be selected.

96. (Currently Amended) The method as claimed in claim 95, <u>all the limitations of which are incorporated herein by reference,</u> wherein said incorporation of said effect of various said derivatives is by deduction of said costs associated with said risk elements.

97. (Currently Amended) The method as claimed in claim 94, <u>all the limitations of which are incorporated herein by reference,</u> wherein said least risk-adjusted cost to said buyer is determined by incorporation of an effect of various said derivatives relevant for completion of said transaction related to each sell offer if said sell offer is to be selected.

98. (Currently Amended) The method as claimed in claim 97, all the limitations of which are incorporated herein by reference, wherein said incorporation of said effect of various said derivatives is by addition of said costs associated with said risk elements.

99. (Currently Amended) The method as claimed in claim 93, all the limitations of which are incorporated herein by reference, wherein relevant derivatives of said selected bid are booked with said online derivative services for completion of said transaction.

100. (Currently Amended) The method as claimed in claim 94, all the limitations of which are incorporated herein by reference, wherein relevant derivatives of said selected bid are booked with said online derivative services for completion of said transaction.

101. (Currently Amended) The method as claimed in claim 90, all the limitations of which are incorporated herein by reference, wherein a minimum required qualifying bid amount is communicated to a potential bidder in response to request for information about a current status of said auctions.

102. (Currently Amended) The method as claimed in claim 91, all the limitations of which are incorporated herein by reference, wherein a maximum allowable offer amount is communicated to a potential seller in response to request for the information about the current status of the reverse auctions.

103. (Currently Amended) The method as claimed in claim 92, all the limitations of which are incorporated herein by reference, wherein sell orders resident in said databases are shown to a potential buyer after online addition of said computed costs associated with said risk elements to a price quoted by one of said sellers for each of said sell orders in response to request for such information in a two-sided matching market and online incorporation of values of applicable derivatives.

104.   (Currently Amended) The method as claimed in claim 92, <u>all the limitations of which are incorporated herein by reference,</u> wherein buy orders resident in said databases are shown to a potential seller after online deduction of said computed costs associated with said risk elements from a price quoted by one of said buyers for each of said sell orders in response to request for such information in a two-sided matching market and online incorporation of values of applicable derivatives.

105.   (Currently Amended) The method as claimed in claim 92, <u>all the limitations of which are incorporated herein by reference,</u> wherein resident sell orders are prioritized for matching an incoming buy order in increasing order of net cost computed by addition of said computed costs associated with said risk elements to a price quoted by one of said sellers for each of said sell orders in a two-sided matching market and online incorporation of values of applicable derivatives.

106.   (Currently Amended) The method as claimed in claim 92, <u>all the limitations of which are incorporated herein by reference,</u> wherein resident buy orders are prioritized for matching an incoming sell order in decreasing order of net price computed by deduction of said computed costs associated with risk elements to a price quoted by one of said buyers for each of said buy orders in a two-sided matching market and online incorporation of values of applicable derivatives.

107.   (Currently Amended) The method as claimed in claim 92, <u>all the limitations of which are incorporated herein by reference,</u> wherein relevant derivatives for said transactions are booked with said online derivative services for completion of said transactions.

REMARKS

Claims 1-27 and 55-107, all the claims pending in the application, stand rejected on prior art grounds. Applicants respectfully traverse these rejections based on the following discussion.

I.   The Prior Art Rejections

Claims 1-27 and 55-107 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lange (U.S. Patent No. 6,321,212), in view of Hartman, et al. ("Online Databases: Information Available Electronically"), hereinafter referred to as Hartman. Applicants respectfully traverse these rejections based on the following discussion.

The claimed invention provides a method, system, and computer program product for enabling online incorporation of the effects of uncertainty and risk factors while negotiating e-commerce transactions. In the rejection, the Office Action argues that the prior art of record discloses many features of the claimed invention. More specifically, the Office Action argues that "Lange discloses premium to derivatives prices which is a cost added due to risk" (Office Action, p. 11, item 2). Nevertheless, Lange fails to disclose that such "cost" (i.e., the "derivative prices") is determined "by using data corresponding to parameters of said transactions in conjunction with requirements of applicable market rules and information from said databases" (independent claims 1, 28, and 55). Instead, such "cost" is determined by the value of the underlying security, asset, liability or claim on which the derivative is based; and/or, the "cost" is determined by "supply and demand." Therefore, as explained in greater detail below, Applicants respectfully submit that the prior art of record does not teach or suggest the claimed invention.

Applicants traverse the rejections because the prior art of record fails to teach or suggest the claimed features of "determining costs associated with one or more risk elements by using data corresponding to parameters of said transactions in conjunction with requirements of applicable market rules and information from said databases." Such features are defined in independent claims 1, 55, and 82 using identical language.

The Office Action argues that "Lange discloses premium to derivatives prices which is a cost added due to risk" (Office Action, p. 10, para. 3 – p. 11, para. 1). Nevertheless, Lange fails to disclose that such "cost" (i.e., the "derivative prices") are determined "by using **data corresponding to parameters of said transactions** in conjunction with **requirements of applicable market rules** and **information from said databases**" (independent claims 1, 55, and 82). Instead, the "cost" in Lange is determined by the value of the underlying security, asset, liability or claim on which the derivative is based; and/or, the "cost" is determined by "supply and demand" (Lange, col. 3, para. 3).

In other words, the "derivative prices" of Lange (which the Office Action asserts teaches the "costs associated with one or more risk elements" of the claimed invention) are not determined by the claimed combination of three factors, namely: "data corresponding to parameters of said transactions," "requirements of applicable market rules," and "information from said databases" (independent claims 1, 55, and 82). Instead, the "derivative prices" of Lange are determined by the value of the underlying security, asset, liability or claim on which the derivative is based; and/or, the "derivative prices" are determined by "supply and demand" (Lange, col. 3, para. 3).

More specifically, as described in column 3, paragraph 3, of Lange, the return to a trader of a traditional derivative product is, in most cases, largely determined by the value of the underlying security, asset, liability or claim on which the derivative is based. For example, the value of a call option on a stock, which gives the holder the right to buy the stock at some future date at a fixed strike price, varies directly with the price of the underlying stock. In the case of non-financial derivatives such as reinsurance contracts, the value of the reinsurance contract is affected by the loss experience on the underlying portfolio of insured claims. The prices of traditional derivative products are usually determined by supply and demand for the derivative based on the value of the underlying security (which is itself usually determined by supply and demand, or, as in the case of insurance, by events insured by the insurance or reinsurance contract).

Accordingly, Applicants submit that the "cost" (i.e., the "derivative prices") in Lange is not determined by using data corresponding to parameters of the transactions in conjunction with requirements of applicable market rules and information from the databases. Instead, the "derivative prices" of Lange are determined by the value of the underlying security, asset, liability or claim on which the derivative is based; and/or, the "derivative prices" are determined by "supply and demand" (Lange, col. 3, para. 3). Further, Applicants submit that Hartman is introduced by the Office Action for the mere purpose of illustrating "on online database" (Office Action, p. 4, para. 3). Nevertheless, Hartman does not teach determining costs associated with risk elements. Therefore, it is Applicants' position that the proposed combination of Lange and Hartman fails to teach or suggest the claimed features of "determining costs associated with one or more risk elements by using data corresponding to parameters of said transactions in conjunction with requirements of applicable market rules and information from said databases" as defined in independent claims 1, 55, and 82.

Applicants traverse the rejections because the cited references fail to teach or suggest "maintaining an updated online database of currency exchange derivates" as defined in independent claims 1, 55, and 82. The Office Action asserts that such features are disclosed in Lange (Office Action, pp. 3-4, item (h) (citing Lange, col. 1 lines 34-56; col. 2 lines 20-51; col. 7 line 63 – col. 8 line 17; and, col. 92 line 23)). The portions of Lange that the Office Action cites as support for this contention provide an in-depth background discussion of electronic Internet-based trading of financial products, and more particularly, to online trading of securities, equities, bonds, and financial instrument derivatives (col. 1 lines 34-56 and col. 2 lines 20-51). The cited portions of Lange further provide a general teaching of derivative securities (col. 7 line 63 – col. 8 line 17) and a method of updating trader accounts to reflect payouts on financial returns (col. 92 line 23).

However, nothing within Lange, including the portions cited by the Office Action, discloses maintaining an updated online database that includes currency exchange derivatives. Although the Office Action asserts that Lange discloses electronic databases,

none of the databases disclosed in Lange include <u>currency exchange</u> derivatives. More specifically, as provided in column 90 lines 50-57 of Lange, the types of databases within the data storage devices 260 comprise: (1) Trader and Account databases 261; (2) Market Returns databases 262; (3) Market Data databases 263; (4) Event Data databases 264; (5) Risk databases 265; (6) Trade Blotter databases 266; and (7) Contingent Claims Terms and Conditions databases 267. Nevertheless, the above-mentioned databases 260 – 267 do not include a currency exchange database. Applicants submit that nothing within Lange teaches or suggests maintaining data including currency exchange derivatives in the data storage devices 260.

To the contrary, as provided in paragraphs 0003 - 0005 of Applicants' disclosure, an electronic commerce transaction is faced with a number of uncertainties and risks, which are not adequately handled by the existing systems and methods for electronic commerce. These uncertainties and risks may originate from currency fluctuations. Fluctuating currency exchange rates become particularly important for trans-national commerce. When the two counterparties to an online negotiation have different currencies, the fluctuation of currencies exposes at least one of them to foreign exchange risk. This is a serious impediment in the successful internationalization of e-commerce. The prior art does not provide for a means by which the negotiation and matching process can itself take into account, the currency fluctuation effects and can effectively make use of the third party services (such as those providing contractable rates for present and future dates) for matching and price setting as well as for hedging.

Furthermore, on pages 2-3, item 2(h), the Office Action asserts that Lange discloses updating "trader accounts" (Lange, col. 92 line 23), wherein the trader accounts record interest paid to traders on open demand-based adjustable return (DBAR) contingent claim balances and to debit trader balances for margin loan interest (Lange, col. 20 line 65 – col. 21 line 2). Moreover, the Office Action argues that Lange discloses updating a "trader's credit rating" (Lange, col. 92 line 58). However, nothing within Lange, including the portions cited by the Office Action, teaches or suggests updating an online database of currency exchange derivatives. Rather, Lange only teaches updating

records relating to payouts to traders and credit ratings of traders and not to currency exchange.

Therefore, Applicants submit that nothing within Lange, including the portions cited by the Office Action, teaches or suggests maintaining an updated online database of currency exchange derivatives. Rather, the portions cited by the Office Action merely provide a generalized teaching of derivatives trading and derivative security. Moreover, Lange only teaches updating records relating to traders.

Additionally, the Office Action argues that Lange discloses Asian and Bermudan options (Office Action, p. 4, para. 1 (citing Lange, col. 56, lines 21-22 and 26-32)). Nevertheless, Lange fails to teach or suggest "maintaining an updated online database" of the Asian and Bermudan options "associated with each activity involved in completing said e-commerce transactions" (independent claims 1, 55, and 82). In other words, information regarding the options is not maintained and updated in an online database. Instead, the options are merely provided as an example of a contingent claim upon which a financial product is dependent upon (see Lange, col. 15, lines 42-44 "Examples of Groups of DBAR Contingent Claims").

As discussed above, Lange discloses seven types of databases within the data storage devices 260. These databases include the Trader and Account databases 261, the Market Returns databases 262, the Market Data databases 263, the Event Data databases 264, the Risk databases 265, the Trade Blotter databases 266, and the Contingent Claims Terms and Conditions databases 267. However, Lange does not teach or suggest that any of the databases in the storage devices 260 can include information regarding the Asian and/or Bermudan options that is maintained and updated online.

The Office Action references FIG. 4 of Lange to assert that the databases 261-267 disclose a database of currency exchange derivatives (Office Action, p. 4, para. 1). However, nothing within FIG. 4 teaches or suggests that the databases 261-267 could include an updated online database of the Asian and/or Bermudan options. The Office Action argues that the Market Data Database 263 comprises customized data information including prices, yields, index levels, and historical data (Office Action, p. 4, para. 1 (also

citing Lange, col. 93, lines 25-43)). Nevertheless, such customized data has nothing to do with currency exchange.

Accordingly, Applicants submit that Lange fails to teach or suggest a database of currency exchange derivatives that is maintained and updated online. Information regarding the Asian and Bermudan options is not maintained in a database that is updated online; rather, the options are merely provided as an example of a contingent claim upon which a financial product is dependent upon.

Further, Applicants submit that Hartman is introduced by the Office Action for the mere purpose of illustrating "on online database" (Office Action, p. 4, para. 3). Nevertheless, nothing within Hartman mentions that such a database is maintained and updated with data including currency exchange derivatives. Therefore, it is Applicants' position that the proposed combination of Lange and Hartman fails to teach or suggest the claimed feature of "maintaining … an updated online database of currency exchange derivatives associated with each activity involved in completing said transactions" as defined by independent claims 1, 55, and 82.

Additionally, Applicants submit that because the prior art of record does not teach or suggest maintaining an updated online database of currency exchange derivatives, then the prior art references do not teach using information from such a database for determining costs associated with risk elements and for modifying data corresponding to parameters of transactions. Such features are defined in independent claims 1, 55, and 82 using similar language.

Applicants also traverse the rejections because the prior art of record fails to teach or suggest the claimed features of "maintaining … an online database of customized information related to risks at a given point of time for specified transactions" as defined in independent claims 1, 55, and 82. The Office Action argues that such features are disclosed in Lange (Office Action, p. 3, item (g)). In support for this contention, the Office Action references the "observation period" discussed in column 17 lines 32 – 36 and column 21 lines 53 – 56 of Lange.

The cited portions of Lange disclose that the observation period can be provided as a time period during which the contingent events are observed and the relevant outcomes determined for the purpose of allocating returns. Real-time market data may be provided to support frequent calculation of returns and to ascertain the outcomes during the observation periods.

However, the observation period does not determine information related to "risks" (independent claims 1, 55, and 82). Rather, Lange only discloses determining *outcomes* of events during the observation period "for the purpose of allocating returns." As further provided in column 98 lines 43 – 45 of Lange, process 429 in FIG. 5 represents the observation period during which the outcome of the event underlying the contingent claim is observed. Applicants respectfully submit that Lange fails to teach or suggest determining information relating to "risks" during the observation period, because Lange only determines "outcomes," not "risks."

Furthermore, Applicants submit that the event "outcomes" determined during the observation period of Lange are not maintained in an online database. As discussed above, the Office Action asserts that Lange discloses electronic databases in the data storage device 260; however, nothing within Lange teaches maintaining an online database of customized information related to risks at a given point of time for specified transactions. As provided in column 90 lines 50-57 of Lange, the types of databases within the data storage devices 260 comprise: (1) Trader and Account databases 261; (2) Market Returns databases 262; (3) Market Data databases 263; (4) Event Data databases 264; (5) Risk databases 265; (6) Trade Blotter databases 266; and (7) Contingent Claims Terms and Conditions databases 267. Nevertheless, the above-mentioned databases 260 – 267 do not include a database of customized information related to risks at a given point of time for specified transactions that is maintained and updated online.

In addition, Applicants traverse the rejections because the prior art of record fails to teach or suggest the claimed features of selecting a winning bid based on risk. Such features are defined in dependent claims 13, 40, and 67 using the following language: "wherein a winning bid for desired goods or services in an online auction is selected on a

basis of highest risk-adjusted payout to said seller," and in dependent claims 14, 41, and 68 using the following language: "wherein a winning offer for desired goods or service in an online reverse auction is selected on a basis of least risk adjusted cost to said buyer.

The Office Action argues that Lange discloses selecting a winning bid based on risk. In support for this contention, the Office Action cites Lange (col. 58 line 47 – col. 59 line 5; col. 4 line 57 – col. 5 line 61; col. 6 line 47 – col. 7 line 18; and, col. 33 lines 14-15). However, nothing within Lange, including the portions cited by the Office Action, teaches or suggests <u>selecting</u> a winning bid based on risk. Instead, the cited portions of Lange only disclose <u>preparing</u> a bid based on risk.

Specifically, column 58 lines 47 – column 59 line 5 of Lange discloses that firms involved in competitive bidding for goods or services, whether by sealed bid or open bid auctions, can hedge their investments and other capital expended in *preparing the bid* by investing in states of a group of DBAR contingent claims comprising ranges of mutually exclusive and collectively exhaustive auction bids. In this way, the group of DBAR contingent claim serves as a kind of "meta-auction," and allows those who will be participating in the auction to invest in the distribution of possible auction outcomes, rather than simply waiting for the single outcome representing the auction result. Auction participants could thus hedge themselves against adverse auction developments and outcomes, and, importantly, have access to the entire probability distribution of bids (at least at one point in time) *before submitting a bid into the real auction*. Thus, a group of DBAR claims could be used to provide market data over the entire distribution of possible bids. Preferred embodiments of the present invention thus can help avoid the so-called Winner's Curse phenomenon known to economists, whereby auction participants fail rationally to take account of the information on the likely bids of their auction competitors.

Accordingly, the cited portions of Lange merely disclose considering risk factors in <u>preparing</u> a bid to be submitted in an auction. Nothing within Lange discloses considering risk factors to <u>select</u> a winning bid.

Further, Applicants submit that Hartman is introduced by the Office Action for the mere purpose of illustrating "on online database" (Office Action, p. 4, para. 3). Nevertheless, nothing within Hartman mentions selecting a winning bid. Therefore, Applicants submit that the proposed combination of Lange and Hartman fails to teach or suggest the claimed feature "wherein a winning bid for desired goods or services in an online auction is selected on a basis of highest risk-adjusted payout to said seller" as defined by dependent claims 13, 40, and 67. Further, the proposed combination of Lange and Hartman fails to teach or suggest the claimed feature "wherein a winning offer for desired goods or service in an online reverse auction is selected on a basis of least risk adjusted cost to said buyer" as defined by dependent claims 14, 41, and 68.

Therefore, it is Applicants' position that the prior art of record does not teach or suggest many features defined by independent claims 1, 55, and 82 and that such claims are patentable over the prior art of record. Further, it is Applicants' position that dependent claims 2-27 and 56-81, and 83-107 are similarly patentable, not only because of their dependency from a patentable independent claims, but also because of the additional features of the invention they defined. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

II.   Formal Matters and Conclusion

In view of the foregoing, Applicants submit that claims 1-27 and 55-107, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

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